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Presenting to Senior Decision Makers: Clear, Concise & Complete

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Kirk Michealson

- Retired Navy Surface Warfare Officer, government acquisition analyst
- Retired Lockheed Martin Fellow
- Now owns his own consulting company.
- Previous President for a national professional society MORS (Military Operations Research Society), is a current Fellow, and received the lifetime achievement award for an operations research analyst practitioner.
- Major analytical projects included determining the Navy ship force structure for the first Quadrennial Defense Review, developing Lockheed Martin's experimentation process with analytical rigor, and incorporating analysis into the government and industry affordability efforts.
- Kirk has been an instructor for the MSOM graduate program since August 2015
 - Teaching Introduction to Decision Support Tools for Operations Managers, Decision Models / Decision Analysis, Economic Decision Making, Project Management for Operations Managers.
 - Future courses include Lean Six Sigma Green Belt and Probability & Statistics.



Presenting Information and Results to Senior Decision Makers: *Clear and Concise, but Complete*



University of Arkansas
Masters of Science in Operations Management Webinar

Date: 15 May 2018

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So you have to brief your senior leaders and decision makers? What do you do? What do decision makers like? How do you develop the presentation? What should be included? What are some “good” and “bad” examples?

This brief will help answer those questions.

Acknowledgements

- This presentation draws on the chapters of two textbooks and material developed for two decision analysis courses
 - Chapter 12, Parnell, G.S., Bresnick, T. A., Tani, S.N., and Johnson, E. R., Handbook of Decision Analysis, Wiley Operations Research/Management Science Handbook Series, Wiley & Sons, 2013
 - Chapter 13, Parnell, G. S., Driscoll, P. J., and Henderson D. L., Editors, Decision Making for Systems Engineering and Management, 2nd Edition, Wiley Series in Systems Engineering, Wiley & Sons Inc., 2011
 - On site professional decision analysis courses offered by Innovative Decisions Inc. by Greg Parnell and Terry Bresnick.
 - Online Decision Models course (OMGT 5443) in the M.S. in Operations Management Program at the University of Arkansas (<http://operations-management.uark.edu/>) by Greg Parnell, Terry Bresnick, and Kirk Michealson
- This presentation also draws on two previous briefings for the Military Operations Research Society (MORS):
 - "Presenting Information and Results to Senior Decision Makers," Jerry Scriven, MORS Continuing Education Committee, 82nd MORS Symposium, June 2014
 - "Presenting Analysis to Senior Leaders," Army FA49 Qualification Course, 4 June 2014

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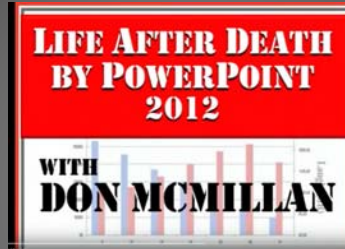
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The information in this brief is from several sources:

- The text and course material from the Decision Models course in the MSOM Program,
- Other material from decision analysis projects from our MSOM Program Professors, and
- Material from briefings for the Military Operations Research Society (MORS).

Motivation



[Life and Death by PowerPoint](https://www.youtube.com/watch?v=MjcO2ExtHso)

<https://www.youtube.com/watch?v=MjcO2ExtHso>

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First, let's start with a little motivation. Here is a short funny brief on development briefs.

Agenda

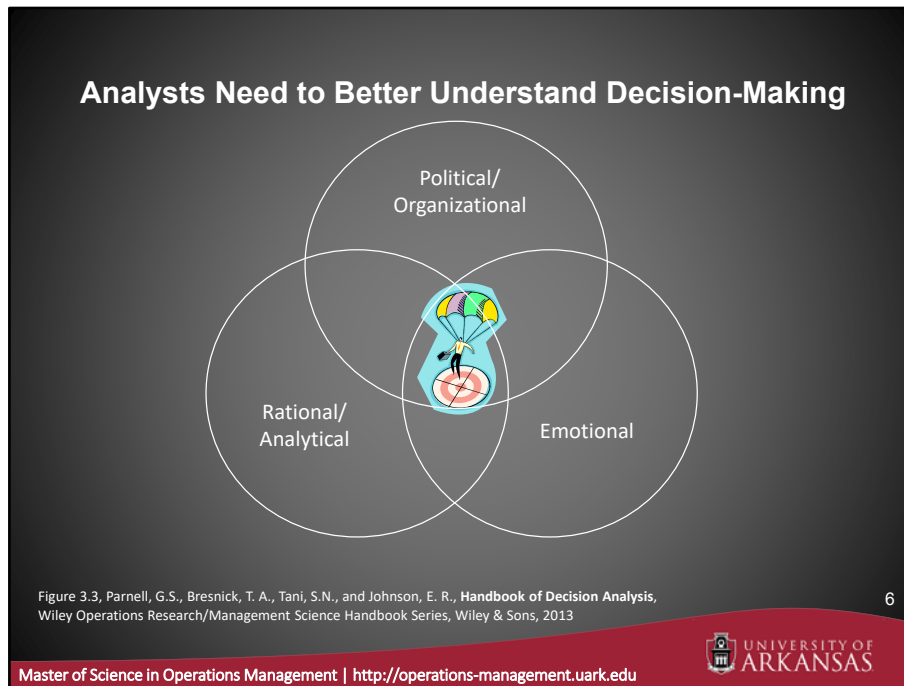
- **Understanding Decision Makers and Senior Leaders**
- Developing the Presentation
- Presentation Recommendations
- Summary

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Here is the agenda for this brief. Let's start with understanding decision makers and senior leaders.



Let's start with understanding decision making and decision makers / senior leaders.

In order for analysts to brief decision makers and stakeholders, first we need to better understand decision making.

We are very familiar in the rational / analytical circle, but we must recognize the political / organizational and emotional circles.

We need a communications tool to cover the political / organization, the emotional, and the rational / analytical aspects.

Briefing Decision Makers

- Busy
 - Difficult to see
 - Gatekeepers control access
- Establish vision and strategic objectives
 - Interested in how your idea fits with their agenda
 - Knowing their objectives is valuable
- Control resources
 - Analysis champion requires their approval
 - Their support is usually critical
- Recommended minimum briefings
 - Discussing potential new analysis
 - Obtaining approval for analysis plan
 - Providing a decision briefing



Get access to senior leaders early in the analysis and at key decision points.

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Now, let's try to understand decision makers better.

We know they are busy, and many have a senior staffer that is a gatekeeper to control access. We need to work with those gatekeepers to gain access.

By understanding and meeting with the decision maker, we can establish a vision and strategic objectives to present to the decision maker to know how our plans fits in with their agenda, showing their objectives are valuable.

Sometimes it's good to know who the decision maker's analysis champion is to first brief them to learn the decision makers insights before briefing the actual decision maker.

There are three minimum times when decision makers should be briefed: discussing potential new analysis, obtaining approval for the analysis plan, and providing the results briefing.

Obtaining Approval for the Project



- Define the problem
- Describe the desired product
- State the need date
- Identify the constraints
- Provide resources

Senior leaders get what they inspect, not what they expect.*

* Carla Gude, former IBM Vice President for R&D

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What I learned early in my career is that all decision makers don't know exactly what they want. There's this story and the discussion goes something like this:

- "I want a rock"
- "What kind of rock"
- "You know"
- Well, you bring them a rock and they don't like it so the discussion continues.

With that first meeting, and hopefully several meetings, with the decision maker you want to learn the points in these 5 bullets (read the bullets). We think "something," we have to get the senior leaders to confirm what we think – and that's not easy. But we can make it easier for them if we do these 5 bullets.

Agenda

- Understanding Decision Makers and Senior Leaders
- **Developing the Presentation**
- Presentation Recommendations
- Summary

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Let's move into developing the presentation with some recommendations.

1st Meeting: Understanding the Problem

- What is your purpose? Do you have a well defined **problem**?
- Who are your **stakeholders**?
- Are there any **constraints or limitations** you have to work with?
- What **environmental variables** impact your solution set?
- Is it clear **why** a decision needed?
- Is “**do nothing**” a feasible solution?
- Is there a **timeline** associated with the decision?
- Who will your **audience** include during the decision briefing?
- Do you have known **opposing views** on the decision team?



“Begin with the end in mind.”
Stephen F. Covey

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Beginning with the end in mind does not mean that you are working to prove the answer you want. Instead, you are working to generate a set of feasible solutions and then design your presentation to best represent the information and recommendations based on your research and analysis.

When developing the brief, you are the independent broker. You must have the facts present themselves in a way that the audience sees the answer for themselves.

6th bullet: “Do nothing” is the status quo or current situation.

Next Step: Conducting Research & Analysis

- Are your assumptions sensible enough to **avoid major criticisms**?
- Are there gaps in the information you were **expected to know**?
- Were you able to **modify environmental variables** within reason?
- Are there **trade-offs** that need to be considered?
- What variables make the solutions **sensitive**?
- Did you **verify** your solution set against your constraints?
- What **tools** are essential and available for your analysis?



"Essentially, all models are wrong, but some are useful."
George E. P. Box

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Here are some questions to consider while preparing the brief.

Have you reviewed lessons learned as part of your research effort?

Do you really understand the environmental variable associated with your problem?

What can you logically assume without assuming away your problem?

Do all your stakeholders agree with your assumptions?

These questions and those listed on the slide are questions the briefer will need to find out.

The “Coal Chute”

- Inherited the family vacation home
 - Fallen in disrepair, all windows and doors boarded shut
 - Found a dirty, dusty coal chute that was open
 - Entered the home, but was covered with coal soot
- Spent the year fixing the home
 - Double door entry to a lovely spiral staircase
 - Installed a beautiful chandelier over the spiral staircase
 - Great way to introduce visitors to this grand house
- Invited friends and co-workers to the home
 - Entry? Via the coal chute
 - Wanted to impress them with his incredible diligence and hard work!



Don't take Decision Makers down the coal chute!

Parnell, G.S., Bresnick, T. A., Tani, S.N., and Johnson, E. R., *Handbook of Decision Analysis*, Wiley
Operations Research/Management Science Handbook Series, Wiley & Sons, 2013, pp. 328-329

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Here's a story of an individual inheriting the family vacation house. It fell into disrepair and the only entry was through a dirty, dusty coal chute.

The analogy is that the house is a difficult decision problem, the man is the briefer, and the friends and co-workers are the decision makers and senior leaders. Just like the man, the briefer wants to impress the decision makers with their incredible hard work and diligence in resolving the difficult problem. Decision Makers don't want to take the same “down & dirty” journey that the briefer took by going down the coal chute. Rather, they want to go to the analysis results by entering through the double doors seeing the beautiful chandelier lighting the spiral staircase. Do not take the decision maker down the coal chute!

Developing your Story

Major insights and key results of the analysis

- **Why are we here?** Why is this relevant?
- **Describe the problem** – in simple terms.
- **What is not** part of the problem or decision maker's control?
- **Show the logic** so they see the rational decision on their own.
- **Gain acceptance** of your logic or solution strategy.
- **Create visuals** that are impactful and have a lasting message.
- **Know the risks** and anticipate reactions to your message.

"If you can't explain it simply, you don't understand it well enough."
Albert Einstein

Logic is the core of your story
Don't skip over!



...but don't lose your audience!

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If you had or have questions, then so will your audience. Anticipate them, resolve them and put them to rest.

Convince your audience and especially your decision maker that they would have used the same logic.

Critical to be sure your audience doesn't lose your logic or invalidate the beginning of your story. This is an important step and should not be rushed or skipped over. **Keep it simple, clear and rational.**

Get them to see the answer for themselves.

Proven Presentation Guidelines

- Allow time for the senior decision-maker to talk
 - Once you are in let them determine how long you stay
- Use fewer and better slides
 - Use 10-15 slides for 30 minutes
 - No matter how many slides you think you need, “cut” that number by 70% - at least
 - Always state (restate) the problem/issue/challenge
 - Put a summary of the key message on every chart
 - Brief the message
 - Nobody cares how hard you worked on the problem
 - If your slide needs lots of explanation, delete it
- “Seek first to understand then to be understood”
 - Listen to the question
 - Answer questions briefly and clearly



You “pass the test” if you are working the right problem.

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Here are some proven guidelines when briefing senior leaders.

- Allow the decision maker to talk, once your in the meeting let them determine how long you stay.
 - Sometimes it is better to sit and listen.
- Use fewer and better slides:
 - When I was a briefer in the Pentagon, I was allowed a 1-page point paper and 1-2 slides to get my point across, and sometimes setting the stage for review was included in that 1-page / 2-slides.
 - What’s provided on the slide is great advice, plus there are some good best practices available.
 - If you can have several slides like the first sub-bullet, recommend a BLUF slide up front: Bottom-Line-Up-Front and perhaps an approach or process slide.
 - A summary of the key message is like the red boxes I have been using.
- When the senior leaders ask questions
 - Listen to what they have to say, wait until they are done before answering, and answer succinctly.
 - Sometimes it’s just yes, no, and I’ll get back with you.
 - You do not want a long dialogue.

The red box reinforces what we have been saying in this brief – get to the senior leaders early to ensure you are working the right problem – that would be passing the test.

Executive Summary Briefs

- When the analysis is finished, you are 50% done
- Pre-brief key advisors
 - Incorporate their comments and suggestions
 - Identify political and emotional constraints
- Do not use your analysis output
 - Summarize the results of your analysis
 - Tell what it means to the decision-maker
- Keep the charts clear and concise
 - Tell a story
 - Avoid extraneous information



"Bring the decision-maker through the front door."

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The first bullet is very true. When you are done with the analysis, you still have 50% to do to develop and communicate the results. I've seen that modified slightly: 30% to define the problem (and get it confirmed), 20% for the analysis, and 50% for the communications.

We talked about pre-briefing the analysis champion early in this chapter. If you can pre-brief all the advisors and get insights to include, that's better.

Remember to keep the charts clear and concise – do not include extra information. You DO NOT want to include all your analysis. Depending on the decision maker and advisors, you may include information in the back-ups in case particular questions come up. The goal is telling a story and providing insights.

As an analyst, we tend to like to tell everything we did. However, for decision makers, since they don't have a lot of time, we need to develop and present executive summary presentations.

Pre-Brief Key Advisors

- Communicate with the **stakeholders** early and often.
- Listen to views of known **antagonists / pessimists** in advance.
- Discuss preliminary findings with **subject matter experts**.
- Share new data formats with **users** early to gain acceptance.
- Discuss results, findings or recommendations with **key stakeholders**.
- Don't hold onto bad news – **be the trusted agent**.
- **Give adequate time** to educating others and getting their feedback!



The better you understand your audience and the better they understand you, the easier this process becomes.

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On the last slide I mentioned briefing key advisors. Let's expand on that a little. Here are some recommendations for briefing them.

The 2nd bullet has always be key for me. I'd rather know any potential issues before briefing the senior leader or decision maker.

"The better you understand your audience and the better they understand you, the easier this process becomes.

Getting a Decision

- Have your problem, assumptions, and methods been accepted?
- Have the gaps of information been accepted?
- Has your logic and your story been accepted?
- Has the audience introduced new information not considered?
- Were risks made clear and a mitigation strategy developed?
- Have you delivered a solid conclusion and recommendation?
- Do you have a trusting relationship with the decision maker?



Request the decision and find out who is charged with implementing the decision.

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Have the gaps of information due to time, funding or stakeholder participation been accepted?

Is there pressure for a decision due to program synchronization, operational needs, personnel needs or opportunities lost?

It is important that the analyst/presenter has built trust with the stakeholders, core decision making team and the decision maker/leader along the way.

Don't be surprised if the decision maker wants a combination of solutions. Consider that ahead of time to be prepared for the discussion.

Agenda

- Understanding Decision Makers and Senior Leaders
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Next, I will cover some presentation recommendations. First recommendations on slides.

Recommendation: Visual Information

- **Clear**/Concise/Concrete/Correct/Coherent/Complete/Courteous ¹
- Is it **necessary**? Is it large enough?
- Show visual only **when ready**.
- Provide a “wow” factor and confirm **facts**.
- **Guide them** to see it for themselves.
- Avoid confusing the mind. (**Stroop Effect**)
- **Move on!** Let them store the visual.



Yellow blue green
white purple yellow
red blue green
purple green red
yellow green red
purple

Yellow blue green
white purple yellow
red blue green
purple green red
yellow green red
purple

“People are generally better persuaded by the reasons which they themselves discovered...” Blaise Pascal

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[¹ 7Cs of Communicating was published by MindTools.com]

“People are generally better persuaded by the reasons which they themselves discovered, than by those which have come into the mind of others.” - Blaise Pascal

Click once to have the audience read the “color of the text only” not the “text” itself.
Click once again to have them try and read the color of the text.

Notice no pattern, no reason, no emphasis... its confusing – don’t do this!

Recommendation: Explaining Charts

- Do not add graphs from the web that you cannot explain or are hard to read.
- Can you explain “quintile” quickly and simply if asked?
- How do you explain why the income levels are not equally grouped?

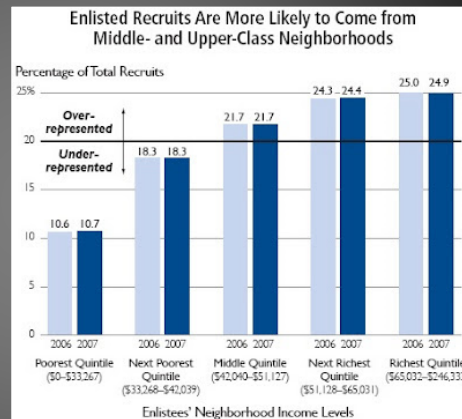


Chart were found on The Heritage Foundation website

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[Charts were found on The Heritage Foundation website.]

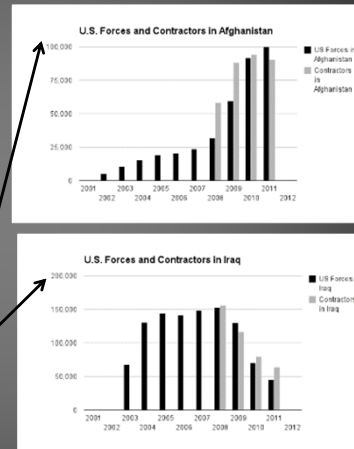
This table comes from a report by Shanea J. Watkins, PhD, originally posted on the [Heritage Foundation](http://www.heritage.org) website, 21 August 2008, titled: Who Serves in the U.S. Military? The Demographics of Enlisted Troops and Officers.

<http://www.heritage.org/research/reports/2008/08/who-serves-in-the-us-military-the-demographics-of-enlisted-troops-and-officers>

If you include information from the web, ensure you understand them and can answer questions.

Recommendation: Same Scales

- Give the audience a reference point to compare when possible.
- Don't confuse discussion with color if not necessary.
- Compare like items and don't draw conclusions that are not part of your story.
- Use matching scales and label your axes.



Charts were found on University of Denver's Private Security Monitor website.

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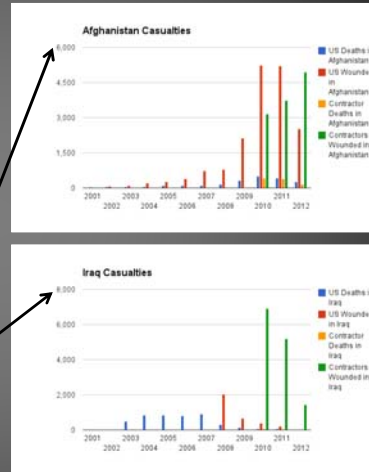
[Charts were found on University of Denver's Private Security Monitor website.]

http://psm.du.edu/articles_reports_statistics/data_and_statistics.html

Another recommendation if you are displaying two or more charts, ensure the charts have the same scales so the decision makers can compare them.

Recommendation: Matching Color Schemes

- When using color, use matching color schemes for similar data.
- Explain how this information serves a purpose leading to your recommendation.
- Use matching scales and label your axes.
(Necessary to repeat.)



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Charts were found on University of Denver's Private Security Monitor website.

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[Charts were found on University of Denver's Private Security Monitor website.]

http://psm.du.edu/articles_reports_statistics/data_and_statistics.html

Color can be used very effectively in briefings to decision makers. If you do, ensure there are matching color schemes across charts in the slide – and the entire brief.

I'm also reinforcing the point of matching scales on this slide.

BLUF (Bottom Line Up Front): Mission Engineering

NDIA SED and INCOSE Offer to Lead Industry Task Team on Mission Engineering: (1) State of industry practice and (2) Role of industry

- Both government and industry are doing mission engineering with shared areas of interest, but:
 - Mission Engineering requires more definition,
 - There are challenges associated with Mission Engineering,
 - There is a need for the right enablers; such as practices, tools, modeling, and data, and
 - There is a need to hone Mission Analysis / Mission Engineering skills based on the items above
- Collaboration between DoD and industry can help ME effectiveness

The defense industry can be a key Mission Engineering partner to address the needs.

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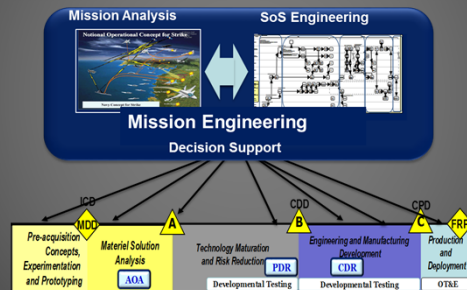
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Now let's transition to recommended slides. Remember when I briefed about 1-slide, summary slides? This is the first of two recommended types: this is the Bottom Line Up Front or BLUF slide. These are presented in the beginning of the brief.

This is the first of two BLUF slides in a brief industry presented to OSD(ATL) on the new Mission Engineering capability. It includes the task, the initial insights, and a tagline.

BLUF: Mission Engineering & System Acquisition

OSD(ATL)'s Mission Engineering definition: "the deliberate planning, analyzing, organizing, and integrating of current and emerging operational and system capabilities to achieve desired warfighting mission effects."



Industry Study Highlights: Mission Analysis, SoS Engineering, and Decision Support across the lifecycle support Mission Engineering.

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This is the second BLUF slide for the Mission Engineering brief with visuals. It has the OSD(ATL) definition, how industry interprets Mission Engineering visually, and some industry highlights.

For both of these BLUF slides, you are telling the story in one slide up front. Many senior leaders and decision makers like to know the bottom line in the beginning.

Process Charts

Many decision maker's like analysis process charts

- Gives them confidence that you understand their problem
- Gives them confidence you have a plan
- Improves understanding of your plan
- Can show how team members participate



A process chart that describes systematic process may be the most important chart in the presentation.

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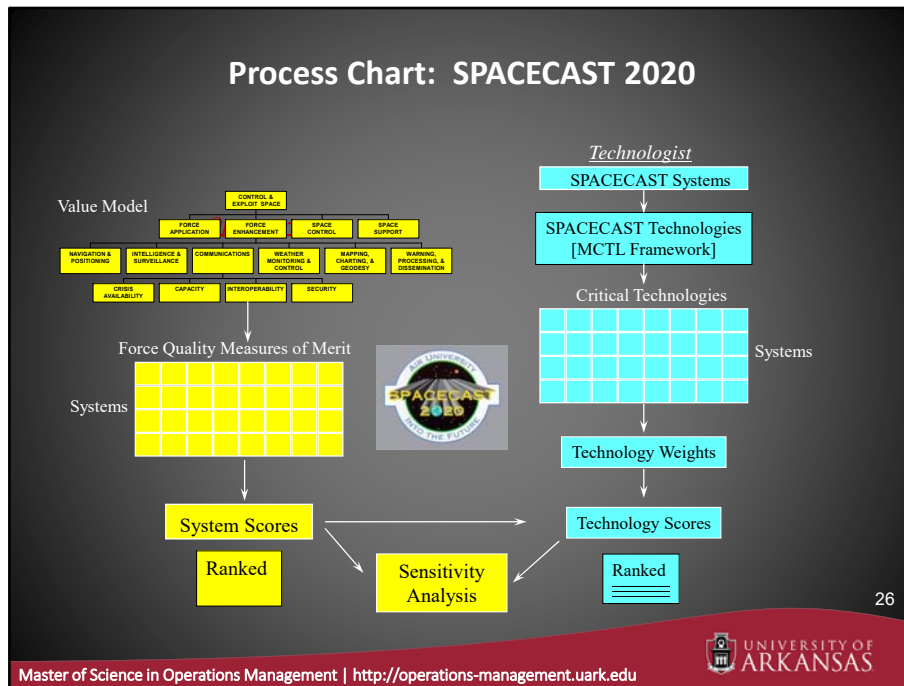


Here is another 1-slide, summary slide. This is the process chart.

Most decision makers like a process chart up front, but a chart that's not too complicated. You want to make sure you give them confidence you understand their problem and that you have a plan. Doing this with the senior leader improves understanding of the plan and can describe how team members are participating.

As the red box says, most decision makers like a process chart that is a systematic process.

Let's discuss a few good process charts as examples.



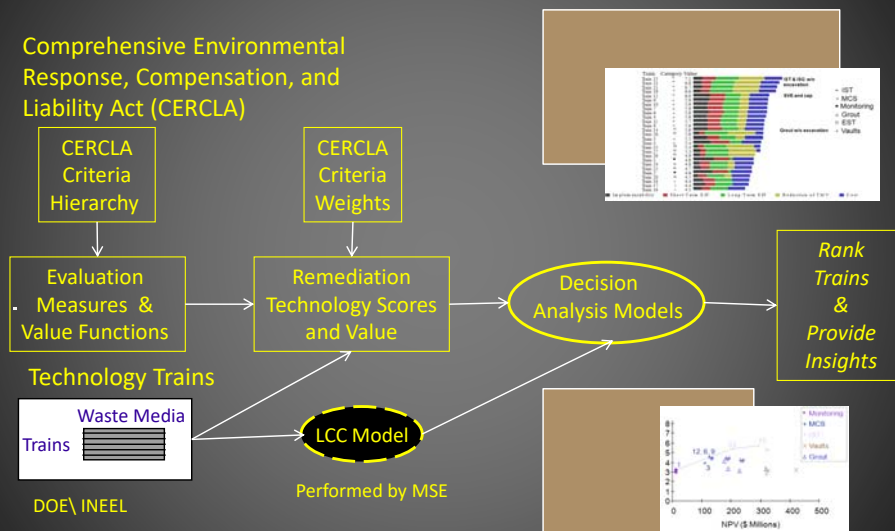
Here is an example of a process chart that was presented to the senior leaders in the Air Force. Our MSOM Program Director Dr. Greg Parnell worked a futures project with the Air Force on what technologies would be available for the future operations.

It shows the process with the operators on the left (determining their value model, their measures of merit for systems, and ranking the scores), and the technologists on the right (technologies available, critical technologies for systems, and ranking the technology scores).

This is a complete process chart that tells a good story.

During Dr. Parnell's first brief to a 3-star General, the General pulled this slide out of the brief and referred to it throughout the brief. When they were done, the General stated this was the first time they understood the process as the brief was presented.

Process Chart: DoE Environmental Management Decision



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Here's another process chart example, this one for the Department of Energy and used for a spill example.

It shows what source material was used, the evaluation of alternatives, the weightings, and conducting decision analysis working towards the component value chart and lifecycle cost charts.

One slide tells the entire picture.

“Bad”: MNC-I Requires Riverine Forces

- The enemy has been employing the Tigris River to move materiel.
- There have been 94 coalition casualties in the Multi-National Division – North AOR.
- Therefore, Multi-National Corps – Iraq requires three companies of riverine forces.

“A picture is worth 1000 words.” Anonymous

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Now let's provide a couple “bad” and “good” examples presenting the same information.

This is the “bad” example with just bullets. As the red box states, “A picture is worth a 1000 words.”

“Good”: Riverine Forces Required to meet Threat on Waterways

- BLUF: Enemy activity is centered on inland waterways.



In the last 12 months:

- ★ 57% of all caches
- ★ 62% of all indirect fire
- All within 1km of an inland waterway,
- Resulting in 94 coalition casualties
- 3 companies of Riverine forces are needed.

Notional Data

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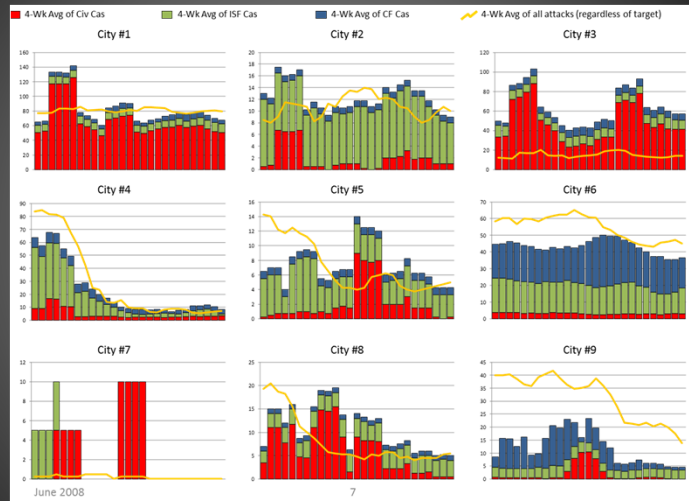
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Here's the corresponding “good” chart presenting the same information. A map with info on the map and in bullets.

“Bad”: Campaign Violence

Scales are inconsistent



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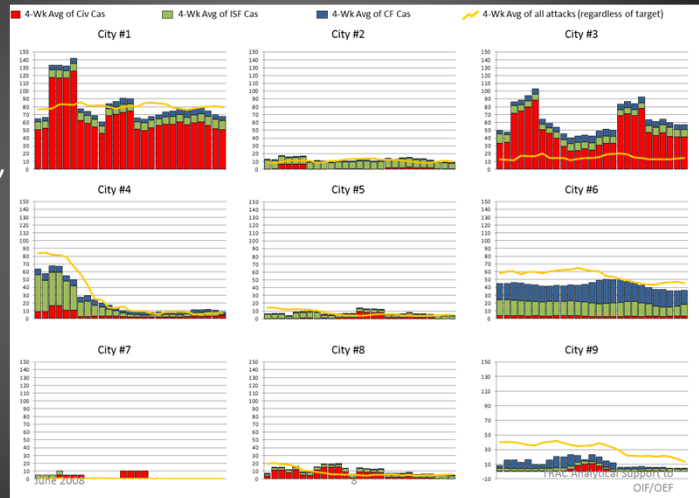


This is a “bad” example of different scales on the vertical axis. I guess the goal was to show vertical bars on all 9 graphs.

Decision makers cannot do comparisons in a short briefing.

“Good”: Campaign Violence

Scales are now consistent



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Here is the same chart, but with consistent scales – i.e., now a “good” chart. Decision makers can make comparisons from city to city.

“Bad”: Survey Results

Question	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Q1: How is security in your village?	2.5	0.2	3.0	0.2	2.7	0.2	3.3	1.0	3.8	0.2
Q2: How safe do you feel while traveling from village to village?	1.5	0.2	2.0	0.2	1.7	0.2	2.1	1.0	2.5	0.2
Q3: How satisfied are you with your ability to use electric power?	3.0	0.2	3.2	0.2	2.8	0.2	3.2	1.0	3.1	0.2
Qn: ...										

- Security is improving. ☐
- Electrical power remains relatively constant. ☐
- Wave 4 had smaller sample; therefore higher variance. ☐

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Finally, here is another “bad” chart, this time with some survey results. It is hard to read with a highlighted table and associated bullets.

“Good”: Survey Results



- Security is improving over time.
- People feel more safe in their villages than they do when traveling.

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A graph shows the table results much better, to be a “good” chart. Since electrical power remains relatively constant, it was not included on the graph. The decision maker can interpret this one much easier.

Tables vs. Charts

Use Tables When ...

- Looking up individual values,
- Ensuring data must be precise,
- Comparing specific values, and
- Communicating quantitative information that involves more than one unit of measure.

Use Charts When ...

- Featuring patterns, trends, and exceptions,
- The message is contained in the shape of the values, and
- The document is used to reveal relationships among multiple values.

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The first decision is whether to use a table or a chart.

First,

- Does your audience need to look up specific values?
- Do they need to compare specific values?
- Do they need precise values?
- Do you have multiple series with different units?

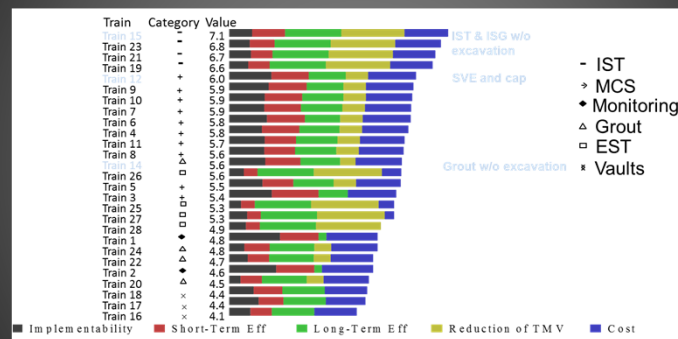
If so, then a table should be used. TIP: A slide filled with a data table may be difficult to read. A suggestion would be to make a handout for your audience.

(BUILD, CLICK) Then,

- Do you want to feature patterns, trends, or exceptions?
- Do you want to feature relationships or make comparisons?

If so, then a chart should be used. TIP: Data should be available or presented in an appendix to the document.

Colors can be Used to Highlight the Differences in Alternatives.



IST alternatives have the highest value but have significant implementation risk.

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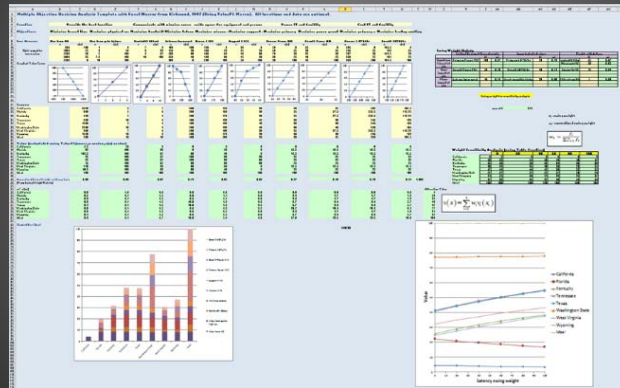
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In the recommendations, I mentioned colors could be very effective in charts. Here's a chart example where you have the alternatives on the left, the categories with symbols, and the decision attributes in color. Color is used to highlight differences in the attributes.

This chart shows the alternatives with the highest values, but in this case, they also have significant implementation risk.

For this example chart colors were used very effectively – but first you must ensure the decision maker is not color blind. Find out before briefing them.

Do Not Take the Decision-maker Through the “Coal Chute.”



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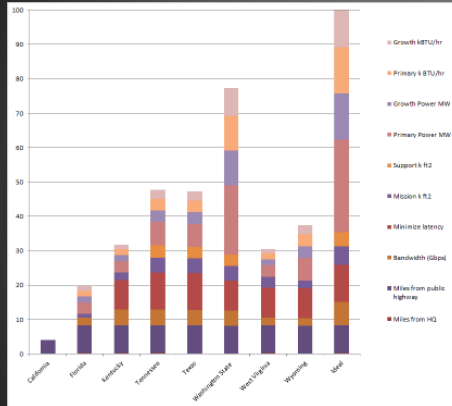
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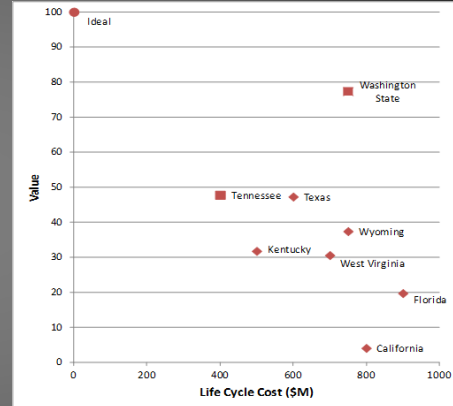
During the developing the presentation section, I presented the “Coal Chute” story and recommended not taking the decision maker through the “coal chute,” but take them through the “front door.”

This is Multiple Objective Decision Analysis (MODA) model, and as an analyst, I love the detail. This was considered to be presented to go over all the details of the analysis. However, if you included this in the brief, that would be exactly like taking the senior leader “through the coal chute.” You would overwhelm the decision maker instead of taking them “through the front door.”

Through the “Front Door”: Charts That Provide Insights.



This value component chart shows opportunities to improve the best solution.



This value vs. cost chart shows non-dominated and dominated solutions.

Figure 3.3, Parnell, G.S., Bresnick, T. A., Tani, S.N., and Johnson, E. R., *Handbook of Decision Analysis*, Wiley Operations Research/Management Science Handbook Series, Wiley & Sons, 2013

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For the MODA analysis on the previous slide, here are the two summary charts that were presented to decision makers and senior leaders that took them through the front door.

The Component Value Chart on the left shows the decision maker values across all alternatives and the ideal, as well as opportunities to improve the decisions (using color) for the best solution.

The Value vs. LifeCycle Cost Chart on the right shows dominate and non-dominate solutions from the decision maker’s value and cost perspective.

Chart Best Practices

- Some chart *best practices* or guidelines are necessary – sometimes called “formatting do’s and don’ts.”
- The following slides will present a few highpoints.
- The bottom line:

The best displays are often the simplest.

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Now for the next section on chart best practices, guidelines, or formatting do’s and don’ts.

After you have selected the chart, there are some best practices or “formatting do’s and don’ts” when creating your charts. The next slides will present these guidelines.

Formatting Do's and Don'ts

Once you have selected the appropriate type of chart, there are some formatting guidelines you should follow so that your chart is easy for your audience to use.

- **Chart Titles** – Should have a meaningful title.
- **Legends** – If more than one series of data:
 - The series should be labeled or a legend should be used,
 - The legend should be positioned at the top of the graph, and
 - Do not put a border around the legend.
- **Axis Titles** – Should be meaningful and contain the unit of measurement.

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Here is the first slide of some chart formatting do's and don'ts.

For the color comment, for more information see page 73 of Stephen Few's "Telling Compelling Stories with Numbers."

Formatting Do's and Don'ts # 2

- **Color** – Natural muted colors should be used.
- **Tick Marks** –
 - Should be placed on the outside of the axis and
 - If categories are used, tick marks should not be used.
- **Scales** –
 - Should not have numerous zeroes (i.e., millions instead of 1,000,000)
 - Should begin at zero with few exceptions (e.g., to highlight a section of data)
 - Scales that do not begin at zero can be misleading.
 - If it is necessary to change the beginning value (narrow the scale) to show differences in your data, add a note.
 - If you want to highlight your differences, you may want to consider a different chart.
- **Avoid Using 3-D and Overlapping** –
 - Even if the data has three dimensions, don't make it a 3-D chart.
 - Don't have your columns or bars overlap, it confuses the audience.

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Additional information:

- **Tick Marks** – There should be enough values so that it is possible to read the chart but no so many that the area is cluttered.

Agenda

- Understanding Decision Makers and Senior Leaders
- Developing the Presentation
- Presentation Recommendations
- **Summary**

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Let's summarize what we have learned.

presentation
Avoiding 10 common mistakes

1. Not preparing enough.
2. Not familiarizing yourself with the venue or equipment.
3. Ignoring your audience.
4. Using inappropriate content.
5. Being too verbose.
6. Using ineffective visuals.
7. Overcrowding text.
8. Speaking incoherently.
9. Showing a lack of dynamism.
10. Avoiding eye contact.



These 10 common presentation mistakes were published by MindTools.com

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 UNIVERSITY OF ARKANSAS

Here are 10 common presentation mistakes published by MindTools.com (publicly available on line.)

Mistake 1: Not Preparing Enough

Steve Jobs was a famously inspiring speaker. His speeches may have looked effortless, but, in reality, each one took days or weeks of preparation. Careful preparation is essential. The amount of time you spend on planning depends on your situation, but it's a good idea to start early – you can never be too well-prepared. Proper preparation also helps you manage [presentation nerves](#) . When you know your material inside and out, you're far less likely to feel nervous. Our [presentation planning checklist](#) and Bite-Sized Training session on "[Giving Better Presentations](#)" can help you plan your next event properly.

Mistake 2: Not Familiarizing Yourself With the Venue and Equipment

Imagine that your presentation starts in an hour. You arrive at the venue and, to your horror, the projector won't work with your laptop. The slides you spent hours preparing are useless. This is a disaster! You can avoid a situation like this by taking time to familiarize yourself with the venue and available equipment at least once before your presentation. Often, the sort of problems that can jeopardize your presentation will be situations beyond your control, but this doesn't mean that you are helpless. Conduct a [risk analysis](#) to identify potential issues, and come up with a good "[Plan B](#)" for each one.

Mistake 3: Ignoring Your Audience

Sometimes, speakers can get so wrapped up in delivering their presentations that they forget about the needs of their audience.

Start your presentation by telling your audience what to expect. Let them know what you will cover first, whether and when you'll stop for a break, if you'll be taking questions during the presentation, and so on. Providing these "signposts" up front will give your audience a clear idea of what to expect, so that they can

relax and concentrate on your presentation.

Mistake 4: Using Inappropriate Content

The primary purpose of any presentation is to share information with others, so it's important to consider the level you will pitch it at.

Do some research on your audience. Why are they here? How much do they already know about your topic, and what do they most want to learn from you? It's no use giving a presentation that is so full of [jargon](#) that no one understands you. But you wouldn't want to patronize people, either. Try to put yourself in people's shoes, to get a clearer idea about their needs and motivations. You can also greet individuals as they arrive on the day, and ask [questions](#) to get a feel for their level of knowledge. This will also help you to personalize your presentation and make a connection with each person in your audience, so that they'll be more attentive to what you say.

Mistake 5: Being Too Verbose

Short, concise presentations are often more powerful than verbose ones. Try to limit yourself to a few main points. If you take too long getting to your point, you risk losing your audience's attention. The average adult has a 15- to 20-minute attention span, so, if you want to keep your audience engaged, stick to the point! During the planning phase, make a note of the themes you want to cover and how you want to get them across. Then, when you start filling out the details, ask yourself: "Does my audience really need to know this?" Our articles on the [7 Cs of Communication](#) and [Communications Planning](#) have more tips for communicating in a clear, concise way.

Mistake 6: Using Ineffective Visuals

Poor slides can spoil a good presentation, so it's worth spending time getting yours right. We've all seen slides with garish colors, unnecessary animation, or fonts that are too small to read. The most [effective presentation visuals](#) aren't flashy – they're concise and consistent. When choosing colors, think about where the presentation will take place. A dark background with light or white text works best in dark rooms, while a white background with dark text is easier to see in a brightly lit room.

Choose your pictures carefully, too. High-quality graphics can clarify complex information and lift an otherwise plain screen, but low quality images can make your presentation appear unprofessional. Unless an image is contributing something, embrace the negative space – less clutter means greater understanding. Use animation sparingly, too – a dancing logo or emoticon will only distract your audience.

Mistake 7: Overcrowding Text

The best rule of thumb for text is to [keep it simple](#). Don't try to cram too much information into your slides. Aim for a maximum of three to four words within each bullet point, and no more than three bullets per slide. This doesn't mean that you should spread your content over dozens of slides. Limit yourself to 10 slides or fewer for a 30-minute presentation. Look at each slide, story, or graph carefully. Ask yourself what it adds to the presentation, and remove it if it isn't important.

Mistake 8: Speaking Incoherently

Even though we spend a significant part of the day talking to one another, speaking to an audience is a surprisingly difficult skill, and it's one that we need to practice. If nerves make you rush through a presentation, your audience could miss your most important points. Use [centering](#) or [deep breathing](#) techniques to suppress the urge to rush. If you do begin to babble, take a moment to collect yourself. Breathe deeply, and enunciate each word clearly, while you focus on speaking more slowly. Our article on [better public speaking](#) has strategies and tips that you can use to become a more engaging speaker. One useful technique is [storytelling](#) – stories can be powerful tools for inspiring and engaging others. Our Expert Interviews with [Annette Simmons](#) and [Paul Smith](#) have tips that you can use to tell great stories.

Mistake 9: Showing a Lack of Dynamism Another common mistake is to freeze in one spot for the duration of your presentation.

Some presenters feel most comfortable behind the podium. Try to emulate great speakers like [Steve Jobs](#), who

moved purposefully around the stage during his presentations. As well as working the stage, he used gestures and [body language](#) to communicate his excitement and passion for his subject. Pay attention to what your hands are doing – they're important for communicating emotion. But only use gestures if they feel natural, and avoid being too flamboyant with your arms, unless you want to make your audience laugh! See our Expert Interview, "[Winning Body Language](#)," to learn more about body language and what it says to your audience.

Mistake 10: Avoiding Eye Contact

Have you ever been to a presentation where the speaker spent all of his time looking at his notes, the screen, the floor, or even at the ceiling? How did this make you feel? Meeting a person's gaze establishes a personal connection, and even a quick glance can keep people engaged. If your audience is small enough, try to make eye contact with each individual at least once. If the audience is too large for this, try looking at people's foreheads. The individual may not interpret it as eye contact, but those sitting around them will.

Summary

- Communicating with decision makers
 - Get access early and often
 - Make sure you are working the right problem
 - Respect their time
 - Need to remind them of your project
 - Brief your own work – and have your team members brief their own work
 - Put yourself in the decision maker's shoes
 - Rehearse with someone who does not know your topic
 - Provide executive summary briefings
 - Include one chart summary (BLUF and/or Process Chart)
- Three communication opportunities
 - Get started – understand the decision-maker's problem
 - Obtain approval for work plan - systematic approach
 - Provide a decision briefing - tell a story



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Let's do a quick review of making presentations to decision makers and senior leaders.

We talked about communicating with senior leaders (can read bullets)

- (1st – 4th bullets read; after 3rd bullet) There have been senior leaders who gave you a certain amount of time, and when that time was completed, you were done whether you were done briefing or not.
- (5th – 7th bullets read)
- (After 8th bullet) As we discussed, the one-chart summary can be the BLUF (Bottom Line Up Front) or Process chart.

We also talked about the communication opportunities listed. These are the three minimum times you would really like to meet with the decision maker (read bullets).

Questions?

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Any questions?